

ILLUSTRATIONS OF SOME WESTERN AUSTRALIAN FISHES.

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(Figures 1 to 6.)

Numerous rare or interesting fishes were encountered during my recent residence in Western Australia, and some new species were described in the last "Australian Zoologist"; there is a great deal of research to be done on the fishes of that vast State. A few illustrations are offered here with brief descriptions to distinguish some novelties from their congeners.

I am grateful to Mr. S. Fowler, Senior Research Officer, C.S.I.R., Division of Fisheries, for his excellent photographs of the specimens.

- (1) An unnamed Shark, *Mystidens innominatus*, gen. et. sp. nov.

These new generic and specific names are provided for the unnamed Galeid shark from Useless Inlet, Shark's Bay, figured in my "Fishes of Australia," Vol. I., 1940, p. 105, fig. 103. This shark is distinguished from all others by having smooth teeth, without trace of serrations, acute, broad-based, not notched, subequal in each jaw except for smaller teeth at symphyses. In front of each jaw on either side of the symphyseal teeth are thirteen teeth. Holotype, Regd. No. I.B.278, in The Australian Museum, Sydney. Known only from jaws.

Originally, I thought that these teeth might have been those of the elusive "nervous shark," a small dark Galeid which I saw at Shark's Bay in 1939. When there in 1943, however, I obtained a specimen of this shy species and found it was the Swan River Whaler Shark, *Galeolamna greyi*, Owen. Thus the smooth-toothed shark requires a new name, as the teeth are quite different from those of hundreds of various sharks personally examined in Western Australia.

- (2) A Conger Eel, *Leptocephalus wilsoni hesperius*, subsp. nov. (Fig. 1.)

Conger Eels are not often met with in Western Australia. The drawing was made from a specimen, 464 mm. (nearly 18½ inches) long, found on Leighton Beach, near Fremantle, 19th April, 1944. (W.A. Mus., Regd. No. P.2603.) It differs in colour from the *Gymnothorax wilsoni* of Bloch and Schneider (Syst. Ichth., 1801, p. 529, New Holland, i.e., New South Wales), being dull greyish above, with slight olive tinge on sides and milk white below; pectoral fins very dark grey; dorsal and anal fins milky-bluish, margined with black; there are no rosy spots. The teeth are shown at lower left; they are mostly uniserial, cardiform, with some enlarged anteriorly; none on roof of mouth.

The depth of the body is subequal to its width anteriorly. The eyes are large and the interorbital is 10 mm. across. About 150 pores in lateral line; the a-d percentage is 16.9. The species is found around the south-western Australian coastline.

- (3) The Breaksea Cod, *Epinephelides armatus* (Castelnau, 1875).

This is a fairly common fish on rocky reefs in south-western Australia, but is not reported from any other State.

The colour is variable, southern specimens at least are usually orange-brown, with darker edges to the scales, whilst some northern examples are darker, almost blackish in hue; the eye is red, often surrounded by yellow, and there is a conspicuous black spot at the vent.

I have seen many examples from Esperance to Geraldton; the one photographed here from life was caught at Square Island, Pelsart Group, Houtmans Abrolhos. The vernacular name is derived from Breaksea Island, off Albany, but the species is also known as Rottneest Cod in Perth, and She Chinaman at Geraldton because females predominate. The true Chinaman Cod (*Epinephelus homosinensis*) of Geraldton is not the male, but a quite different genus, having no scales on its back anteriorly, eleven dorsal spines and seventeen rays, and smaller lateral scales. The Breaksea Cod always has ten dorsal spines and twenty rays, and has tiny auxiliary scales between some of the

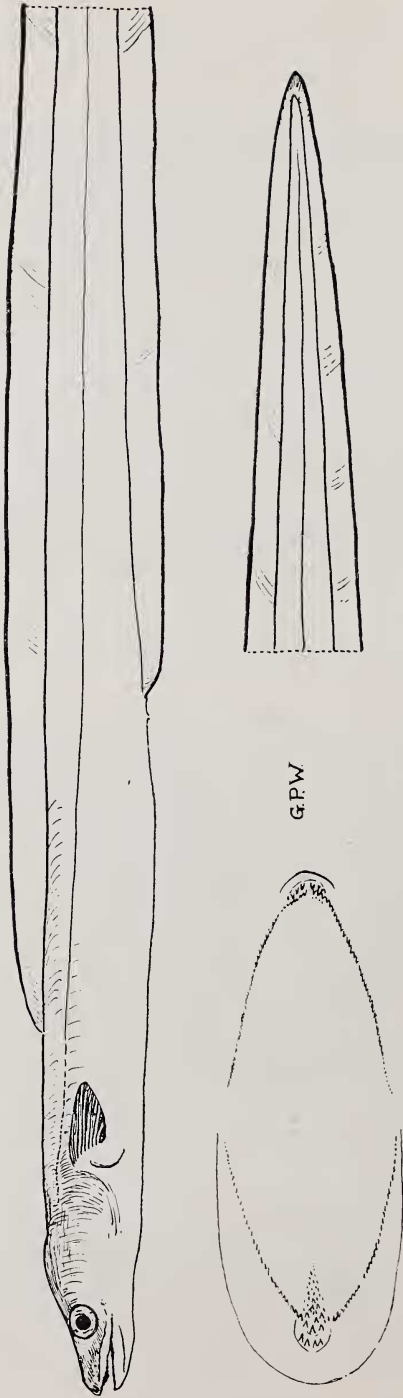


Fig. 1.—Conger Eel.

ordinary ones; also one to three large teeth on each side of mandible. Length up to about sixteen inches and weight 2½ lb.

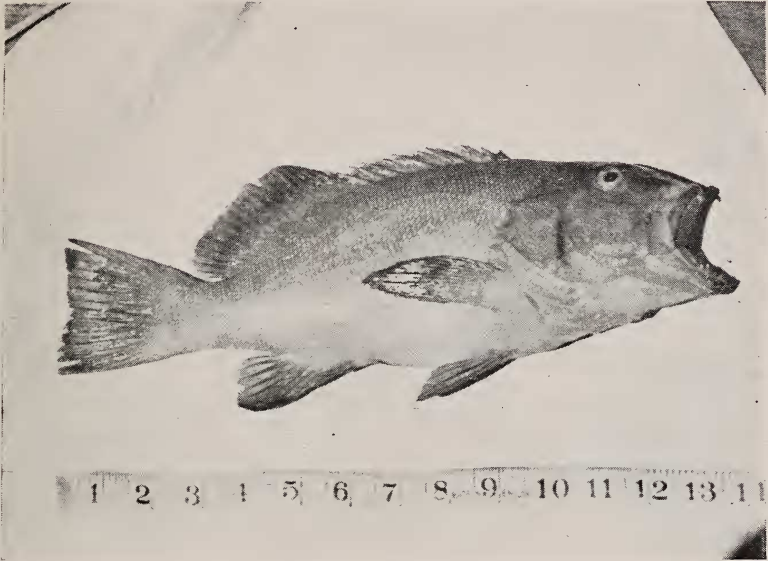


Fig. 2.—Breaksea Cod.

It is an excellent fish for food, either fresh or smoked, but no good illustration has been published before and the species deserves to be better known.

(4) Drummer, *Segutilum cornelii*, sp. nov.

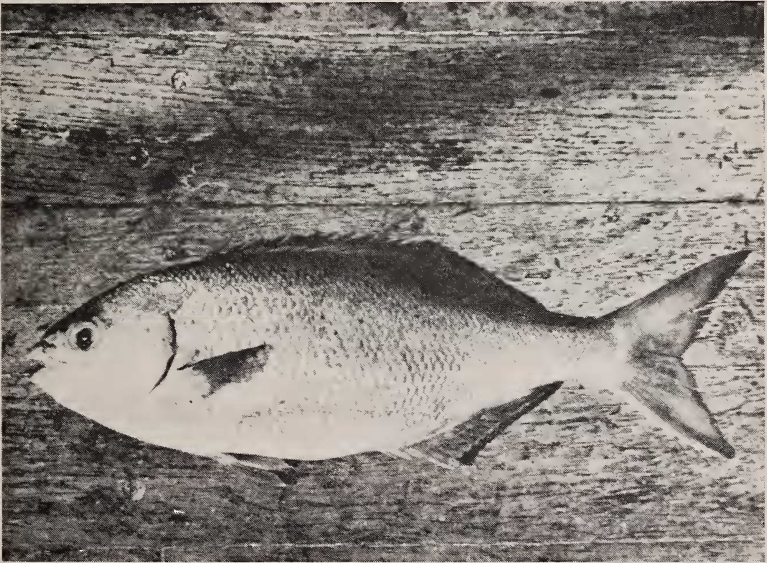


Fig. 3.—Buffalo Bream.

The fishes called drummer in eastern Australia have an impolite name in Western Australia because of their offensive taste and odour. There are several species, distinguished by their fin- and scale-counts. At Pelsart Island, Houtmans Abrolhos, a school was surrounded by our nets on 4th November, 1943, and yielded forty specimens of this new species which has D.xi., 15 or 16; A.iii., 14; l.lat. 50 to hypural, plus 6 scales on tail. Total length, 4.15 mm. Head, 90; depth, 112; standard length, 335 or 374 to caudal fork. Weight, 2 lb. 2 oz. to 2 lb. 11 oz.

Very pale in colour, mostly silvery to grey, becoming pale brownish grey on fins and eyes. Brownish longitudinal bands along scale-rows of flanks. A bronze band before and another below eye.

I name this fish after the "villain" of the Batavia mutiny which, more than 300 years ago, occurred by the place where it was caught.—Cornelius.

(5) Boarfish, *Paristiopterus gallipavo*, sp. nov.



Fig. 4.—Boar Fish.

This remarkable novelty was found floating dead off Rockingham on 23rd February, 1944 (W.A. Mus., Regd. No. P.2589). It was just over two feet in total length, pearly-greyish in colour, with numerous round brownish spots along back; eyes and fins greyish. May be distinguished from all other boarfishes by the following combination of characters: (1) base of spinous dorsal fin shorter than that of soft; (2) posterior dorsal spines elongated and longer than the rays; (3) anal spines three.

(6) Angler Fish, *Echinophryne glauerti*, Whitley, 1944.

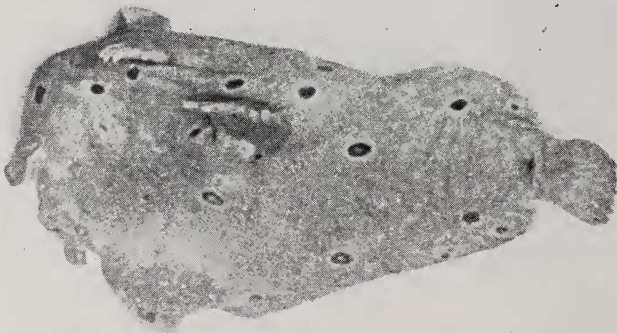


Fig. 5.—Angler Fish.

This remarkable little Angler Fish was described in the last "Australian Zoologist." Only two specimens are known from Cottesloe,

and it is possible that the species hides amongst seaweeds on the jagged limestone reefs. Length, 6½ inches.

(7) Rough-skinned Leatherjacket, *Meuschenia platifrons* (Hollard, 1854).

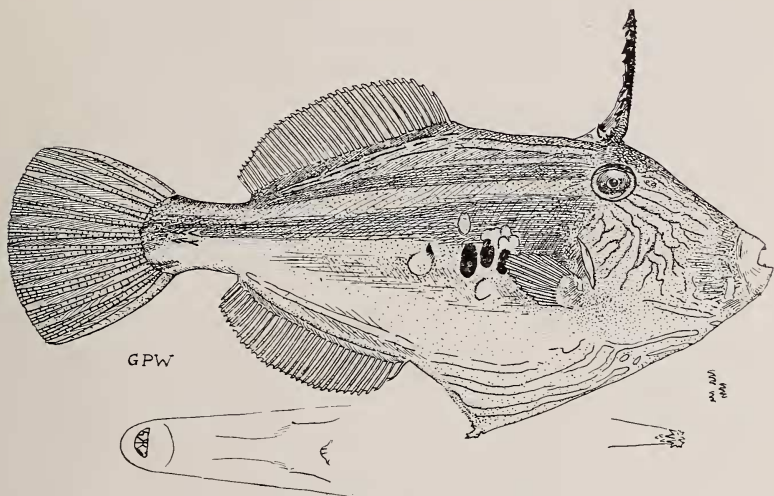


Fig. 6.—Rough-skinned Leatherjacket.

There are many nominal species of Australian leatherjackets, but few good descriptions or figures of them. Since these fishes vary in colour and shape a good deal, they are difficult to identify.

The Rough-skinned Leatherjacket of the Albany district is apparently the same as Hollard's "*Monacanthus platifrons*," described ninety years ago from a damaged specimen from King George's Sound. My drawing shows one from that locality, 9½ inches in total length, weight 8 oz., caught 2nd October, 1943 (W.A. Mus., Regd. No. P.2456). The sex was indeterminable, but I suspect that *platifrons* may be the opposite sex of *M. guttulatus* (Macleay, 1878) = *brownii* (Richardson, 1846), which is called the Smooth-skinned Leatherjacket.

The Sand Leatherjacket of the Albany district is *Nelusetta ayraud*, whilst another genus, *Scobinichthys*, is called Beady Leatherjacket.

Many years ago, leatherjackets were netted by the hundred in King George's Sound, and used as manure by the Chinese market gardeners around Albany. Then it was found that they were of the few fish which would keep on the long train trips to the goldfields (Kalgoorlie, etc.), where there was a sound demand for them.